

REMARKS/ARGUMENTS

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the amendments and remarks herewith, which place the application into condition for allowance. The present amendment is being made to facilitate prosecution of the application.

I. STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 1-13 and 23-29 are pending in this application. Claims 1, 23, and 28-29 are hereby amended in this response. New claim 31 has been added. Support for the amendments can be found throughout the application as originally filed. No new matter has been added.

Claims 3, 5, 9-12, 24, and 28-29 were withdrawn from consideration. It is submitted that the withdrawn claims should be reconsidered and reintroduced into the application when the independent claims from which they depend are found allowable.

II. RECORDATION OF PHONE INTERVIEW

The Examiner is thanked for granting Applicants' attorneys a phone interview on February 10 and February 11, 2009. Participants in the interview on February 10, 2009 included Examiner Andrew Piziali and Applicants' representatives Brian McGuire and Vivek Shankam. Participants in the interview on February 11, 2009 included Examiner Andrew Piziali and Applicants' representative Brian McGuire. In the interview on February 10, 2009, the Non-Final Office Action mailed on January 8, 2009, the Election/Restrictions therein, and the §112, second paragraph, rejections were discussed.

The Examiner agreed to withdraw the §112, second paragraph, rejections on providing a brief description as to how the instant fabric is formed into a continuous loop or made endless.

In the interview on February 11, 2009, the Election/Restrictions in the Non-Final Office Action mailed on January 8, 2009, and proposed amendments to the claims were discussed.

The Interview Summary mailed on February 11, 2009 states:

Applicant's representatives asserted that the restriction is not proper because the claimed combination (allegedly) does not require the particulars of the subcombination to be patentable.

Applicants' representatives respectfully disagree. It is respectfully submitted that contrary to what is stated in the Interview Summary, Applicants' representatives asserted the restriction is improper because the claimed combination requires the particulars of the subcombination to be patentable. In particular, it was stated that the claimed combination, hydroentangling apparatus comprising the hydroentangling support fabric, requires the particulars of the subcombination, the hydroentangling support fabric comprising flat filaments, to be patentable. Appropriate correction is respectfully requested.

The Interview Summary mailed on February 11, 2009 further states:

The examiner indicated that the argument was not persuasive because the phrase 'as claimed for patentability' is present merely to acknowledge that the particulars of the subcombination are claimed for the purpose of obtaining a patent, not that the particulars must be novel characteristic(s) of the claim. (Emphasis added)

Applicants' representatives respectfully traverse this assertion.

First, it should be noted that any patent application or claim filed with the Patent Office is for the purpose of obtaining a patent. Thus, the Examiner's interpretation would render the phrase "as claimed for patentability" extraneous and irrelevant.

Moreover, the Examiner's interpretation is inconsistent with the language of the MPEP.

Applicants' representatives draw the Examiner's attention to MPEP 806.05(c), which states, *inter alia*:

To support a requirement for restriction between combination and subcombination inventions, both two-way distinctness and reasons for insisting on restriction are necessary, i.e., there would be a ~~serious~~ search burden ~~if~~ restriction were not required ~~as evidenced by separate classification, status, or field of search~~. See MPEP § 808.02.

The inventions are distinct if it can be shown that a combination as claimed:

(A) does not require the particulars of the subcombination as claimed for patentability (to show novelty and unobviousness), and

(B) the subcombination can be shown to have utility either by itself or in another materially different combination.

When these factors cannot be shown, such inventions are not distinct. (Emphasis added)

Therefore, in order to support a requirement for restriction between combination and subcombination inventions, both two-way distinctness and reasons for insisting on restriction are necessary.

In this connection, MPEP 808.02 states, *inter alia*:

Where, as disclosed in the application, the several inventions claimed are related, and such related inventions are not patentably distinct as claimed, restriction under 35 U.S.C. 121 is never proper (MPEP § 806.05).

Accordingly, in the instant case, the inventions are not patentably distinct as claimed, and the restriction under 35 U.S.C. 121 is not proper.

The MPEP clearly states that the phrase “claimed for patentability” is to show “novelty” and “unobviousness.” Therefore, with all due respect, the Examiner has misinterpreted the teachings of the MPEP in the Election/Restrictions argument.

MPEP 806.05(c) illustrates an example, where a subcombination is essential to the combination, such as in the instant case, in that:

AB_{sp}/B_{sp} No Restriction

Where a combination *as claimed* requires the details of a subcombination *as separately claimed*, there is usually no evidence that combination AB_{sp} is patentable without the details of B_{sp}. **The inventions are not distinct and a requirement for restriction must not be made or maintained, even if the subcombination has separate utility.** This situation can be diagrammed as combination AB_{sp} (“sp” is an abbreviation for “specific”), and subcombination B_{sp}. Thus the specific characteristics required by the subcombination claim B_{sp} are also required by the combination claim. (Emphasis added)

As indicated above, the claimed combination, hydroentangling apparatus comprising the hydroentangling support fabric, **requires** the particulars of the claimed subcombination, the hydroentangling support fabric with flat filaments, for patentability (to show novelty and unobviousness), and therefore the inventions are not distinct and a requirement for restriction must not be made or maintained, even if the subcombination, the hydroentangling support fabric, has separate utility.

In view of the foregoing remarks, reconsideration and withdrawal of the Election /Restriction of claims 1-13 is respectfully requested.

III. CLAIM REJECTIONS UNDER 35 U.S.C. §112

Claims 23 and 25-27 are rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite. The Examiner, in particular, contends the claims are indefinite because the

distinction between a continuous loop fabric and a made endless fabric is unclear. Applicants respectfully traverse this assertion.

Applicants draw the Examiner's attention to the non-limiting use of such terms at page 7, line 24 to page 8, line 7, which states:

“When employed in a system such as that shown in Figure 3, the fabric of the invention would be formed into a **continuous belt** and the belt would take the place of wire 12.

Hydroentangling support fabrics according to the present invention are preferably woven from monofilaments in both the warp and weft directions. As is well known to those of ordinary skill in the art, the warp monofilaments lie in the cross machine direction (CD) of the fabric produced by either **endless or modified endless weaving, while they lie in the machine direction (MD) if the fabric is flat woven.** On the other hand, the weft monofilaments lie in the machine direction (MD) of a fabric produced by **endless or modified endless weaving, but in the cross machine direction (CD) of a flat woven fabric.**” (Emphasis added)

Accordingly, the instant hydroentangling support fabric can be:

- (a) A continuous loop when it is woven endless without any seam. In this type of a fabric, the weft or shute yarns are in the MD, and the warp yarns in the CD.
- (b) Made endless by modified endless weaving, i.e. by interdigitating the weft seaming loops formed on widthwise edges (CD) of the fabric. In this type of a fabric, the weft or shute yarns are in the MD, and the warp yarns in the CD.
- (c) Or it can be made endless by weaving a flat fabric and seaming the widthwise edges (CD) of the fabric using know methods/techniques. In this type of a fabric, the warp yarns are in the MD, and the weft or shute yarns in the CD.

It is respectfully submitted that an ordinarily skilled artisan is familiar with terms such as “made endless” (i.e., woven and later joined) and “continuous loop” (which includes fabrics that are woven endless).

In view of the foregoing remarks and in accord with the telephonic interview, reconsideration and withdrawal of the §112, second paragraphs, is respectfully requested.

IV. CLAIM REJECTIONS UNDER 35 U.S.C. §§102 & 103

Claims 23 and 25-27 were rejected under 35 U.S.C. §102(b) or, in the alternative, over 35 U.S.C. §103(a) as allegedly being obvious over U.S. Patent No. 5,857,497 to Gaisser (hereinafter merely "Gaisser"). Applicants traverse and respectfully request reconsideration and withdrawal of these rejections.

Independent Claim 1 recites, *inter alia*: "A hydroentangling apparatus for the production of a hydroentangled nonwoven product, the improvement comprising a hydroentangling support fabric comprising flat filaments." Claim 23 recites, *inter alia*: "A hydroentangling support fabric in a hydroentangling apparatus for the production of a hydroentangled nonwoven product, the improvement comprising flat filaments." The Office Action admits that Gassier does not disclose a hydroentangling fabric or device. Instead the Office Action alleges the recitation is an intended use, and that Gaisser's fabric is capable of being used in hydroentangling. For the purposes of clarification, the claims recite a hydroentangling apparatus. Nonetheless, for the reasons given below, Applicants urge that Gassier's fabric is not capable for use for hydroentangling.

Gassier discloses a papermaking fabric and in particular, a drying fabric. Hydroentangling and papermaking processes and devices have wholly different needs. For a non-limiting example that highlights such difference, Applicants draw attention to paragraph 31 of the publication of the Specification (hereafter the Specification):

The fabrics of the invention may be formed as single, double or triple layer weaves.... In such embodiment, the fibers of the nonwoven are supported by the round monofilaments of the

forming side while the flat monofilaments promote greater reflective water flow, and therefore greater reflective entanglement energy, the fabric promotes greater entanglement of the fibers making up the nonwoven, and thereby provides for a stronger finished nonwoven. That is, when water is directed at the fabric in a direction perpendicular, or substantially perpendicular to the plane in which the flattened yarns lie, some water will pass through the forming surface layer and intermediate layer, reflect off the wearside layer, and further entangle the fibers. (Emphasis added)

Thus the design of the hydroentangling fabric requires, *inter alia*, permeability at the forming site surface and the intermediate layer, and yet must reflect at the wearside layer. Moreover, the fabric must be designed to provide the appropriate reflective water flow to effect entanglement.

Gassier, on the other hand explains how its papermaking fabrics must have different structural qualities. At Col 3, lines 16-19, Gassier states:

A fabric having increased fabric stability in the machine direction is provided yet having a high degree of openness and permeability in a range greater than thirty percent of the total fabric area.

And at col 4, lines 26-28

The drying process is outwardly from the heated cylinders through the paper web and through the dryer fabric. Thus sufficient permeability must be had in order to facilitate drying of the fabric.

And at Col. 6, lines 8-11

Increased structural stability is provided in the machine direction without decrease in the permeability or open area of the fabric.

And at Col. 1, lines 30-36

For drying purposes, the carrier fabric must have a high degree of openness and air permeability so that sufficient air is delivered through the base fabric and the embossed layer, which is also

permeable for drying. Carrier fabric must have sufficient load bearing capability for bearing the loads in the machine direction which are the most severe.

Thus, it is clear that Gassier's highly permeable papermaking fabric is in no way designed for hydroentangling. It is respectfully requested that the Examiner give the instant claims their broadest reasonable interpretation in light of the specification.

MPEP 2111.01 (III) clearly states that the ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, *i.e.*, as of the effective filing date of the patent application. In the absence of an express intent to impart a novel meaning to the claim terms, the words should be presumed to take on the ordinary and customary meanings attributed to them by those of ordinary skill in the art. It is the use of the words in the context of the written description **and** customarily by those skilled in the relevant art that accurately reflects both the "ordinary" and the "customary" meaning of the terms in the claims. It has also been established that words in patent claims are given their ordinary meaning in the usage of the field of the invention, unless the text of the patent makes clear that a word was used with a special meaning. Accordingly, the use of the term "hydroentangling" in the instant case, clearly, indicates that the support fabric of the instant invention is applicable only to hydroentangling machines and systems, and therefore one of ordinary skill in the nonwoven production art would not equate a papermaking fabric to a hydroentangling support fabric or even be motivated to use a papermaker's fabric on a hydroentangling machine.

Accordingly, Gassier does not anticipate or render obvious independent claims 1 or 23. As all the pending claims ultimately depend from independent claims 1 or 23, and as nothing in Gassier cures its deficiency as applied to the independent claims, Applicants submit that all the

claims are in condition for allowance and urging reconsideration and withdrawal of the rejections thereto.

Claims 23 and 25 to 27 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 5,142,752 to Greenway (hereinafter merely "Greenway") in view of U.S. Patent No. 4,345,730 to Leuvelink (hereinafter merely "Luvelink"). Applicants traverse and respectfully request reconsideration and withdrawal of these rejections.

In the Office Action, the Examiner contends that "Greenway completely fails to mention round filaments." (Office Action -- page 8). Applicants respectfully traverse this assertion.

The Examiner's attention is drawn to Table I disclosed in col. 5, lines 45-60 of Greenway, which is reproduced herein below:

TABLE I		
Forming Screen Specifications		
Property	36 × 29 flat	16 × 14 flat
Warp wire - Polyester	.0157	.032
Round		
Shute wire - Polyester	.0157	.035
Round		
Weave type	plain mesh	plain mesh
Open area	23.7%	24.9%
Plane difference	—	.008" ± .003
Snag	light	none ± light
Weave tightness (slay)	no angular displacement	no angular displacement
Edges	filled ½" each side	filled ½" each side
Seam	invisible/endless	invisible/endless

Greenway also discloses that entangling member 44 in FIG. 4A, which is a 36x29 mesh weave having a 24% void area, **fabricated of polyester warp and shute round wire**.

(Greenway -- col. 5, lines 14-17). Therefore, Greenway discloses the use of round wires for its forming screen and there is no motivation for one skilled in the art to modify the forming wire of Greenway when there is clearly no teaching or suggestion in Greenway to use wires of other shapes.

The Examiner contends that it would have been obvious to use flat filaments because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability and desired characteristics. However, the secondary reference, Leuvelink, in no way discloses a hydroentangling support fabric in a hydroentangling apparatus for the production of a hydroentangled nonwoven product.

Column 4, line 63 to Column 5, line 23 of Leuvelink, cited by the Office Action, explains that its invention is described in the context of papermaking. As explained above with respect to Gassier, papermaking fabrics and fabrics used in hydroentangling have differing structures; such terms in a claim recite more than a mere “intended use.” They reflect structural differences. In order to advance prosecution, the claims now recite a hydroentangling apparatus for the production of a hydroentangled nonwoven product, and a hydroentangling support fabric in a hydroentangling apparatus for the production of a hydroentangled nonwoven product.

Moreover, to the extent Leuvelink goes outside papermaking, it still limits itself to a spiral link fabric, allowing only some variation for spacing between successive coils, or the introduction of deformation of the hinge wire. Specifically, when Luvelink discloses that “Although the invention has been disclosed in the context of monofilaments of circular cross-section, it may be preferred in some instances to use monofilaments of different form, for example, of flat cross-section” (Luvelink – col. 5, lines 19-23) it refers to “the invention” as disclosed in Luvelink, which is a spiral link-belt having helical coils joined in side-by-side disposition. Therefore, only within this limited structured does Leuvelink allow for the use of flat monofilaments.

The Office Action proffers no evidence or reason showing that an ordinarily skilled artisan would use a spiral link fabric in a hydroentangling apparatus absent Applicant’s own

disclosure of the same in the present application. The Supreme Court in *KSR* has warned against the dangers hindsight reasoning, especially when substitutes are not the result of "common sense." Applicants respectfully note that *KSR v. Teleflex* ("KSR") cautions that hindsight reasoning based on the Applicants' own disclosure distorts analysis: "[a] factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant on ex post reasoning." Emphasis added. As MPEP 2174 "Legal Concept of Prima Facie Obviousness" states:

[T]o reach a proper determination under 35 U.S.C. 103, the examiner must step backward in time and into the shoes worn by the hypothetical "person of ordinary skill in the art" when the invention was unknown and just before it was made. In view of all factual information, the examiner must then make a determination whether the claimed invention "as a whole" would have been obvious at that time to that person. **Knowledge of applicant's disclosure must be put aside in reaching this determination, yet kept in mind in order to determine the "differences," conduct the search and evaluate the "subject matter as a whole" of the invention. The tendency to resort to "hindsight" based upon applicant's disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art.**

The Office Action also alleges the motivation for combining Leuvelink's flat monofilaments with Greenway's conveyor belts is "the expectation of successfully practicing the invention of Greenway." However, the Office Action's reasoning is improper as, assuming for the sake of argument that Greenway's conveyor belts are for hydroentangling, Greenway certainly does not teach that its invention cannot be successfully practiced. To the contrary, Greenway assumes the use of conventional hydroentangling fabrics, i.e. those with **all round yarns** (as evidenced above). It certainly does not teach, implicitly or expressly, than the

successful operation of its entangling member, conveyor means, or curtain above its conveyor means is in any way dependent on flat monofilaments.

In view of Greenway's reliance on conventional nonwoven production lines (see col. 2, lines 11-17), an ordinarily skilled artisan would have no recourse, reason or need to turn to Leuvelink's spiral-link fabric, embodied exclusively as a papermaking fabric.

Accordingly, Applicants believe claims 1 and 23 are presently in condition for allowance and propose urging reconsideration and withdrawal of the rejections thereto. As all the remaining pending claims ultimately depend from these independent claims and as nothing in the art of record cures the deficiency of the Greenway and Leuvelink references, Applicants urge reconsideration and withdrawal of these rejections as well.

Claims 23 and 25-27 were rejected under 35 USC § 103 (a) as allegedly being unpatentable over U.S. Patent No. 5,883,022 to Elsener (hereinafter merely "Elsener") in view of any one of U.S. Patent No. 3,884,630 to Schwartz (hereinafter merely "Schwartz") or U.S. Patent No. 4,104,814 to Whight (hereinafter merely "Whight"). Applicants traverse and respectfully request reconsideration and withdrawal of the rejections.

As understood by the Applicants, Elsener is a textile fabric for use in clinical areas or clean rooms. The towel is for drying hands and skin. Specifically, Elsener discloses an absorbent fabric material of synthetic endless fibers, in particular for use in clinical areas and also clean room areas and also in company and public washrooms (Elsener -- Abstract). Therefore, Elsener has absolutely nothing to do with endless or continuous industrial process fabrics whatsoever.

As understood by the Applicants, Schwartz relates to a towel apparatus which handles an endless towel within a cabinet and subjects the same to cleaning and drying making use of a low vapor pressure chemical type solvent. (Schwartz -- Abstract)

As understood by the Applicants, Whight relates to a clean towel presenting machine, which includes an endless web of liquid absorbent material contained in a casing to discontinuously present a clean portion and simultaneously retract an essentially equal used portion through an intake slot, a cleaning liquid tank and a heater to dry and sterilize the web.
(Whight -- Abstract)

In view of the extensive discussions of hydroentangling fabrics above and in prior responses, it almost goes without saying that an ordinarily skilled artisan would not look to hand towels for teachings on industrial process belts. As indicated above, MPEP 2111.01 (III) clearly states that the ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, *i.e.*, as of the effective filing date of the patent application. In the absence of an express intent to impart a novel meaning to the claim terms, the words should be presumed to take on the ordinary and customary meanings attributed to them by those of ordinary skill in the art. It is the use of the words in the context of the written description and customarily by those skilled in the relevant art that accurately reflects both the “ordinary” and the “customary” meaning of the terms in the claims. It has also been established that words in patent claims are given their ordinary meaning in the usage of the field of the invention, unless the text of the patent makes clear that a word was used with a special meaning. Accordingly, the use of the term “hydroentangling” in the instant case, clearly, indicates that the support fabric of the instant invention is applicable only to hydroentangling machines and systems, and therefore one of ordinary skill in the clean towel art would not equate a clean towel to a hydroentangling support fabric or even be motivated to use a clean towel on a hydroentangling machine.

Applicants respectfully submit that none of these references teach or suggest a hydroentangling support fabric in a hydroentangling apparatus for the production of a hydroentangled nonwoven product, as recited in the instant claims. Thus nothing in Elsener, Schwartz, or Whight discloses or otherwise renders obvious each of the limitations of the independent claims. Dependent claims 2, 4, 6-8, 13 and 25-27 depend from either claim 1 or claim 23 discussed above, and are therefore patentable for similar reasons.

In order to ease prosecution, Applicants respectfully submit Exhibits A-C, which discuss, in general, the type of fabrics used in a hydroentangling process.

As nothing in the art of record cures this deficiency, Applicants propose urging all the claims are in condition for allowance.

CONCLUSION

In view of the foregoing amendments and remarks, all of the claims in this application are patentable over the prior art, and early and favorable consideration thereof is solicited.

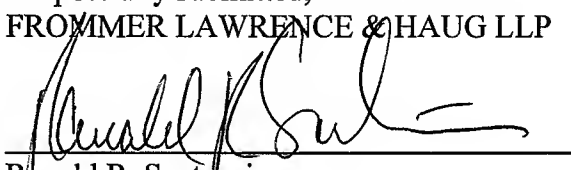
In the event that the Examiner disagrees with any of the foregoing comments concerning the disclosures in the cited prior art, it is requested that the Examiner indicate where in the reference, there is the basis for a contrary view.

Please charge any fees incurred by reason of this response and not paid herewith to Deposit Account No. 50-0320.

If any issues remain, or if the Examiner has any further suggestions, the Examiner is invited to call the undersigned at the telephone number provided below. The Examiner's consideration of this matter is gratefully acknowledged.

Respectfully submitted,
FROMMER LAWRENCE & HAUG LLP

By:



Ronald R. Santucci
Reg. No. 28,988

Brian M. McGuire
Reg. No. 55,445

Ph: (212) 588-0800
Fax: (212) 588-0500